



## AMRTA [*TINOSPORA CORDIFOLIA* (WILLD.) HOOK F. & THOMS.] IN THE LIFE OF PEOPLE OF NORTH MAHARASHTRA.

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### ABSTRACT:

The term 'Amrta' is attributed to *Tinospora cordifolia* (Willd.) Hook f. Thoms. (Menispermaceae) for its broad spectrum utilities in classic as well traditional systems of medicine. The present communication reviews critically the results of ethnobotanical investigation in northern part of Maharashtra (India). The ethnobotanical utilities from this region are compared with the classic literature. Many of these applications are new to the science of ethnobotany in India. These noteworthy applications await further scientific scrutiny to validate and extend on sounder footings. The vernacular names for this species in India are also analysed etymologically.

**Key words:** - Amrta, *Tinospora cordifolia*, North Maharashtra, Ethnobotany.

### INTRODUCTION:

*Tinospora cordifolia* (Willd.) Hook f. & Thoms. (Menisperaceae) is a twinner with corky bark and stems lenticellate. It bears filiform aerial roots, simple cordate leaves and unisexual flowers in spikes. Fruits are ovoid and drupaceous. It is generally called in Indian languages as: Gulwel (Marathi), Gudaj (Gujarathi), Guluncha (Bengali, Telugu) arid, Guduchi, Garuch (Hindi). Gud or Gul means jaggery, which is sweet. This twinner is, in fact, very bitter but ironically called as denoted in these vernacular names (Patil, 2009). It is also popular as 'Giloy' and few other names in India.

Amrta (nectar) is a Hindu mythological term referring to the heavenly 'elixir' which saved the celestial people from senescence and kept them eternally young. The battle of

Rama and Ravana is well mentioned in the great Indian epic Ramayana. To rescue his wife Sita, Lord Rama was also accompanied with army of monkeys. Ravana was killed as also the monkeys, Indra (King of Gods) was very happy at the fall of Ravana. He brought back to life all monkey spraying nectar on them. Some nectar fell on the earth. Wherever its drops fell, plants of Gulwel or Guduchi (Amrta) sprang up (Patil, 2020).

### MATERIALS AND METHODS

The present author's three decade-long research yielded voluminous ethnobotanical information from north Maharashtra (Dhule, Nandurbar, Jalgaon, Nasik and Buldhana districts) apart from other published literature. The data particularly on Amrta (*Tinospora cordifolia*) is published in various treatises. These are reviewed in this

communication. The literary sources are provided against such ethnobotanical revelations. The subject matter is dilated pertinently.

### Systematic Enumeration:

#### I. Roots:

- (i) Roots of plant growing especially on Neem trees (*Azadirachta indica* A.Juss.) are collected. Their decoction (about 15 ml) is administered to ladies for 21 days to increaseilk (Patil *et al.*, 2011).
- (ii) Extract of roots and decoction of tea in equal quantity is drunk at morning and evening to cure jaundice, whooping cough and asthma till cure (Patil *et al.*, 2011).
- (iii) Juice of roots (about two spoonful) is drunk thrice daily for three days to treat typhoid (Patil *et al.*, 2011).
- (iv) Roots are advised to consume against snake bite (Shri.Aawari Guruji, 2002).
- (v) Decoction of roots, two teaspoon is advised for four days twice daily against fever (Ahirrao, 2021).

#### II. Stem:

- (i) Decoction of stem (one cup) is advised daily for 5 to 6 days to a patient suffering from typhoid (Patil & Patil, 2006).
- (ii) A small twig collected at morning is applied with 'Shendur' (red lead). It is tied using black thread around the neck for seven days to treat jaundice (Patil & Patil, 2006).
- (iii) Stem is thought beneficial to inflamed eyes and cataract (Shri Aawari Guruji, 2002).
- (iv) Stem bark is used to check excessive urination (Shri Aawari Guruji, 2002).

- (v) Decoction of stem is drunk to treat body-ache (Patil *et al.*, 2011).
- (vi) Stem is heated and then crushed. Its paste prepared in coconut oil is applied on eczema (Patil *et al.*, 2011).
- (vii) Stem powder homogenised with honey (one spoonful) is consumed daily to reduce acidity till cure (Patil *et al.*, 2011).
- (viii) Stem powder mixed with candy (one spoonful) is consumed daily to check body-heat till cure (Patil *et al.*, 2011).
- (ix) Stem pieces are boiled with rice grains and consumed for three days to cure jaundice (Patil *et al.*, 2011).
- (x) Decoction of stem (about a cup) is drunk for seven days to check fever (Patil *et al.*, 2011).
- (xi) Stem of this species and roots of Ashwagandha [*Withania somnifera* (L.) Dunal] are powdered. A spoonful of it is consumed for three weeks with milk to treat impotency (Patil *et al.*, 2011).
- (xii) Stem is used to tie bundles of fodder (Patil *et al.*, 2011).
- (xiii) Stem of this species and roots of *Cissampelos pareira* L. are powdered. A spoonful of it is consumed at morning before meal for 21 days to cure anaemia (Patil *et al.*, 2011).
- (xiv) Decoction of stem is used as a general tonic. This is generally practiced by rural folks in Jalgaon in winter season (Patil, 2003).
- (xv) Use of decoction of stem as a general tonic in weakness in winter season, besides its utility in chronic fever and diabetes is reported from Jalgaon district (Kshirsagar & Patil, 2008).
- (xvi) A cup of decoction of stem is administered thrice a day for three

days to check fever (Marie D'Souza, 1993).

- (xvii) A cup of decoction is drunk twice a day for 7 to 21 days to control jaundice (Marie D'Souza, 1993).
- (xviii) Decoction of stem bark is applied on joints to relieve joint pain (Ahirrao, 2021).
- (xix) Stem bark powder, one teaspoon, is advised twice daily to control body sugar (Ahirrao, 2021).

### III. Leaves:

- (i) Leaf extract diluted in water (two spoonful) is advised once daily as antipyretic till cure (Patil *et al.*, 2011).
- (ii) Extract of leaves (one spoonful) is drunk twice daily for 3 days to cure cough (Patil *et al.*, 2011).
- (iii) Juice is obtained from warmed leaves. It is mixed in cow's milk (1:1 ratio). A cup of it is drunk at morning for three days to cure jaundice (Patil *et al.*, 2011).
- (iv) leaf juice (about three spoonful) is advised to treat diabetes till cure (Patil *et al.*, 2011).
- (v) Leaf juice, one cup, is advised for one month to a person suffering from jaundice (Ahirrao, 2021).

### IV. Stem And Leaves:

- (i) Infusion is prepared using stem and leaves. It is administered against snake bite (Patil & Patil, 2006).
- (ii) Stem and leaves are dried and burnt. This ash is dissolved in water. It is then boiled till salt is obtained. It is added in a spoonful water and drunk to treat irregular menstruation (Patil *et al.*, 2011).

- (iii) The salt obtained as in above case is added in a cup of milk. It is advised daily to cure jaundice for three days (Patil *et al.*, 2011).

### V. Fruits:

- (i) Decoction of green fruits (about a cup) is drunk for two days to cure fever and liver complaints (Patil *et al.*, 2011).

### VI. Latex:

- (i) Sticky substance after removal of bark is beneficial to improve vision (Shri Aawari Guruji, 2002).

### RESULT & DISCUSSION:

Green wave is discernible to combat various human sufferings throughout. Synthetic drugs are now put on descending spirals. To cope with an increasing demand, we must have information from various quarters of useful information. A plant species which is found widely exhibits an array of uses. Moreover, country like India wherein there is richness of ethnicity, rural and tribal population living close to the nature have better chances of having a rich fund of data on medicinal know-how. A single species is tried by them for defending many human afflictions. Amrta is one such candidate which deserves a comparative study throughout India. The present author extended ethnomedicinal investigation in rural folks and tribal population in five districts *viz.*, Dhule, Nandurbar, Jalgaon, Buldhana and Nasik of North Maharashtra region. This treasure-trove is assessed to have more comparative information.

Plant part-wise ethnomedicinal and ethnobotanical uses are: (I) **Roots:** to increase milk, jaundice, whooping cough,

fever, asthma, typhoid and snake-bite. (II) **Stem:** typhoid, jaundice, inflamed eyes, cataract, excessive urination, body-ache, eczema, to reduce acidity, to check body sugar and body-heat, fever, joint-pain, impotency, as a tonic, anaemia, as antipyretic, cough, diabetes, chronic fever. (III) **Leaves:** as antipyretic, cough, jaundice, (IV) **Stem And Leaves:** Snake-bite, irregular menstruation, jaundice. (V) **Fruits:** Fever, liver complaints. (VI) **Latex:** to improve vision. (VII) **Entire Plant:** These indigenous applications are cross-compared with the classical literary sources such as by Watt (1889-1893), Anonymous (1948-1976), Ambasta (1986) and Jain (1991). Only few applications *viz.*, jaundice, tonic, urinary diseases, antipyretic, sex-strength (impotency) as a fodder are similar with these literary sources. Many of the aforesaid utilities from North Maharashtra region are new to the science of ethnobotany.

The term 'Amrta' is attributed to *T.cordifolia* on account of its efficacy for imparting longevity, youthfulness and vitality who consume it. The essential part is the stem. However, its other parts or products e.g. roots, leaves, fruits and latex have been also reported beneficial to treat an array of human diseases. These vast spectrum utilities are indicative of its being 'Amarta', a panacea or 'Ramban medicine'. The Indian system of medicine (Ayurveda) has already provided wide usefulness. It is interesting to note further that this drug finds place in native medicinal utilities all over India (*cf.* Jain, 1991) and still in vogue.

**(ii) Epilogue:**

The active principles present generally very seasonally or depending upon the age of plant organ (*cf.* Drury, 1985). It is, therefore, one should be cautious while collecting the plant or its part. Another species of the genus *viz.*, *T. sinensis* (Lour.) Merr. is used as a substitute for *T.cordifolia* (Willd.) Hook f. & Thoms. However, the latter is more potent (*cf.* Sivarajan & Balachandran, 1994). The additional uses presently reported are noteworthy. Their further scientific investigation on modern line is obviously desired to validate the claims made on sounder footings.

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